Governor Doyle Announces $7.5 Million in Clean Energy Funding

Projects Expected to Leverage $60 Million in Additional Investments

Governor Jim Doyle has announced $7.5 million in grants and loans from the Wisconsin Energy Independence Fund (WEIF) for research and development and commercialization or adoption of new technologies. These awards will leverage $60.5 million in investments and create new jobs for Wisconsin families on farms, in forests, in research labs and for manufacturers.

"From manufacturing wind turbines and solar panels to retro-fitting fuel pumps and exploring the latest clean technologies, our future lies in seizing green opportunities that will create good jobs for our citizens and add billions of dollars to our economy," Governor Doyle said.

The Wisconsin Energy Independence Fund is an integral part of *Clean Energy Wisconsin*, Governor Doyle's strategy to strengthen Wisconsin's energy future. This comprehensive plan moves Wisconsin forward by promoting renewable energy, creating new jobs, increasing energy security and efficiency, and improving the environment.

Since coming into office, Governor Doyle has worked to make Wisconsin a leader in renewable energy. In 2007, Governor Doyle created the Office of Energy Independence to promote efforts to reduce dependence on foreign oil and advance renewable energy initiatives.

Governor Doyle's plan for energy independence includes: Generating 25 percent of our electricity and 25 percent of the fuels for our cars and trucks from renewable sources by the year 2025; capturing 10 percent of the market share for renewable energy and bioproducts, and utilizing Wisconsin's tremendous capability for research to become the country's leader in making alternative energies more affordable and available to all.

A summary of all funded projects:

American Science and Technology Corporation Wausau

$150,000 Grant

American Science and Technology Corporation is researching the development of vehicular fuels from agricultural and forest products. It will use its grant to research a biorefinery process that can be used in existing pulp and paper manufacturing facilities in Wisconsin.

BEST Energies , Inc. Madison/Cashton

$1,000,000 ($500,000 Grant/ $500,000 Loan)

This start-up company will implement innovative technologies in the production of biofuels. It will use its grant for a two-phase project: 1) to develop groundbreaking technology for recovering corn oil from ethanol production and using this product in its biodiesel facility; and 2) to design and produce efficient ethyl biodiesel products.

Bio-Energy & Environment LLC Madison

$100,000 Grant
Bioenergy & Environmental LLC provides various services in connection with the design and development of biogas energy and environmental solutions. It will use its grant to help fund both

research into algae growth and production variables and the development of a small, prototype "closed reactor" cultivation plant.

Bio-Products Engineering Corporation Richland Center

$70,000 Grant

Newly formed, Bio-Products Engineering Corporation plans to convert high-strength, volatile fatty acids into methane-rich biogas. The grant will help the company finance part of the conversion at laboratory scale to establish parameters needed to commercialize this promising technology.

C&D Technologies, Inc. Milwaukee

$500,000 Loan

C&D Technologies, Inc. markets systems for the power conversion and storage of electrical power, including industrial batteries and electronics. The company will use its grant to design and develop a large-format, lithium-ion energy storage system for use with wind and solar power generation.

C5-6 Technologies, Inc. Middleton

$350,000 Grant

C5-6 Technologies, Inc. was spun out from Lucigen Corporation in 2006 to develop and commercialize enzymes for biofuel production. It will use its grant to develop a group of novel enzymes designed to significantly increase ethanol yield in current corn ethanol plants.

Eaton Corporation Milwaukee

$229,000 Grant

Eaton Corporation is a global leader in electrical systems and components for power quality, distribution and control. The company will use its grant to develop a power conversion and energy storage system that manages the energy from a renewable source.

Energenecs, Inc. Oconomowoc

$313,000 Loan

Energenecs, Inc. provides applications engineering, equipment, and field services for water and wastewater treatment and control systems for municipal and industrial customers. The company will use its loan to expand and upgrade the City of Oconomowoc's wastewater treatment plant. The project will replace the current anaerobic digestion system with a model biogas-to-renewable energy system.

Fuel Makers LLC Eden

$250,000 Grant

Fuel Makers LLC designs, builds, and manages bio-energy facilities for the production of electricity and liquid fuels. The company will use its grant to establish a research and development facility focused on the conversion of cellulosic and other carbon-based materials into methanol, ethanol, diesel fuel and synthetic gasoline.

Grand Meadow Energies LLC Stratford

$265,000 Grant

Grand Meadow Energies LLC has developed a system to produce biodiesel fuel from algae and ethanol from whey wastes. The company will use its grant to develop an optimal blend of these feedstocks to produce biodiesel fuel.

Great Lakes Ag Energy LLC Fitchburg

$250,000 Grant

Great Lakes Ag Energy LLC has been a green-energy developer and consultant to the biofuels industry since 2005. It will use its grant to perfect the conversion of agricultural residues, byproducts, and wood biomass to nano-porous cellulose for conversion to biofuel.

GreenStone Technologies LLC Madison

$250,000 Grant

GreenStone Technologies LLC is a start-up company working to develop and commercialize building-integrated, photovoltaic products using solar cell technology, specifically skylights and windows. The company will use its grant to develop a working prototype of a solar window.

Hilbert Biodiesel LLC Hilbert

$336,000 Loan

Hilbert Biodiesel LLC is a producer of biodiesel fuel. The company will use its loan to produce a high-quality, marketable B100 biodiesel fuel from animal and vegetable waste products.

Idle Free Systems, Inc. Watertown

$250,000 Grant

Idle Free Systems, Inc. develops and produces innovative technologies to eliminate the need for idling truck engines. The company will use its grant to test and develop its biofuel flow system. The system will permit year-round use of biodiesel fuel in diesel-fueled vehicles.

INOV8 International, Inc. La Crosse

$135,000 Grant

INOV8 International, Inc. manufactures a line of oil furnaces, burners, and heaters that use its patented technology to produce heat and/or hot water from waste oils. The company will use its grant to test and develop a dual-fuel burner that will enable restaurants to use waste vegetable oil as fuel to produce hot water.

Johnson Controls-Saft Advanced Power Solutions LLC Glendale

$500,000 Grant

Johnson Controls-Saft Advanced Power Solutions LLC (JCS) is a joint venture between Johnson Controls, a leading supplier of automotive batteries and integrated automotive systems solutions, and

France-based Saft Groupe SA, an energy storage solutions provider with extensive Lithium Ion battery expertise. JCS will use the grant to develop advanced materials, components, and processes for manufacturing lithium-ion batteries for use in hybrid and electric vehicles.

Orion Energy Systems, Inc. Manitowoc

$420,000 ($220,000 Grant/$200,000 Loan)

Orion Energy Systems, Inc. designs, manufactures and provides high-performance, energy- efficient lighting systems, controls, and related services for commercial and industrial customers. The company will use its loan to demonstrate the commercial viability and practical value of its solar-energy-harnessing device for lighting industrial facilities.

Pabst Engineering and Manufacturing, Inc. Onalaska

$250,000 Grant

Pabst Engineering and Manufacturing, Inc. intends to produce scalable anaerobic digesters for medium-sized dairy farms. The company will use its grant to develop a prototype bioreactor that should accelerate the digestion process by up to 90 percent.

Paradigm Sensors LLC Milwaukee

$150,000 Loan

Paradigm Sensors LLC is designing and marketing a hand-held impedance spectroscopy (IS) technology that tests for glycerin, acid, methanol, and blend percentage in biodiesel fuel. The company will use its loan to develop a handheld, biofuel water analyzer in order to test water percentages in biofuels.

Silatronix, Inc. Madison

$243,000 Grant

Silatronix, Inc. is a start-up company founded to develop a novel electrolyte component for use in lithium ion batteries and ultra capacitors. It will use its grant to develop expertise in clean energy engineering and business development to advance the company's technology platform.

SolRayo LLC Madison

$250,000 Grant

SolRayo LLC focuses on new nanotechnology-based materials for energy-storage applications. The company was founded in 2006. It will commercialize a new material that will cut cost and increase the electrical energy storage of ultra-capacitors, making wind and solar energy more practicable for utility use.

Steinbine Development LLC Deerfield

$55,000 Grant

Established in 2007, Steinbine Development LLC develops and manages small hydroelectric plants throughout the country. It is working on an innovative impulse turbine to recover unutilized hydropower resources. It will use its grant to evaluate the turbine's efficiency and life cycle.

Virent Energies, Inc. Madison

$1,000,000 ($500,000 Grant/$500,000 Loan)

Virent Energies, Inc. (Virent) is continuing to develop aqueous phase reforming, an innovative technique for generating biofuels and bioproducts from carbohydrates in biomass. Virent will receive $1 million to design, build, and operate a pilot production plant capable of producing up to 10,000 gallons of gasoline per year.

Agri-Waste Energy, Inc. Emerald

Up to $7 million in Industrial Revenue Bond funding

Agri-Waste Energy, Inc. has developed technology to refine biogas from agricultural waste and convert it to pipeline quality renewable natural gas. This project would develop a biogas collection system that would transport biogas produced from anaerobic digesters at several large dairy farms to a centrally located Gas Conditioning Facility, where it will be conditioned for transport to a major natural gas pipeline. Funding for this project would be used to construct the pipeline from the initial dairy, and to build a digester at another large dairy, connecting both to the Gas Conditioning Facility.

Advanced Fiberglass Technologies Wisconsin Rapids

CDBG loan up to $640 million

Advanced Fiberglass Technologies is one of the Midwest's largest producers of corrosive storage and handling equipment. It will use its loan to expanding its composite manufacturing capacity to produce components for wind energy and methane digester systems. The project could create over 128 jobs.